

ABSTRACT OF THE DISCLOSURE

The power semiconductor device includes
a plurality of trenches disposed in a surface of
a semiconductor active layer to reach a first base
5 layer of a first conductivity type. The trenches are
disposed at intervals to partition a main cell and
a dummy cell. In the main cell, a second base layer of
a second conductivity type and an emitter layer of the
first conductivity type are disposed. In the dummy
10 cell, a buffer layer of the second conductivity type is
disposed. A gate electrode and gate insulating film
are disposed in each trench. A partition structure is
disposed in the surface of the semiconductor active
layer to electrically isolate the buffer layer from the
15 emitter electrode.